## In the Claims:

- 1. (Currently Amended) Apparatus for measuring blood pressure, comprising a generally tubular constrictable sleeve or cuff for a limb of a person, a source for fluid pressure, a detector for providing measurements of slowly varying static pressures in said sleeve or cuff, means for measuring static pressure, and microphone means adapted for being arranged, in use, in proximity to an artery, e h a r a c t e r i s e d i n that wherein the cuff is at least partly enclosed in two essentially concave shell parts displaying a stiffness in an axial direction, along the limb, said shell parts being openable against a restoring force, and in that wherein the microphone means comprises a linear array of microphone elements [[is]] disposed on a joint support which emulates a universal joint type support in one shell part essentially perpendicular to the longitudinal axis of such shell part and near the lower end.
- 2. (Currently Amended) Apparatus according to claim 1, e h a raeterised in that wherein signal selection means of the diversity reception type are used to select the microphone that provides the best signal-to-noise ratio.
- 3. (Currently Amended) Apparatus according to claim 1, e h a r a c t e r i s e d i n that wherein the microphone signal is amplified and made available to an electroacoustic converter for enabling listening to the signal.
- 4. (Currently Amended) Apparatus according to claim 3, e h a r a e t e r i s e d i n that wherein the signal is output via a built-in speaker in the apparatus.
- 5. (Currently Amended) Apparatus according to claim 3, e h a r a e t e r i s e d i n that wherein the signal is output via a wireless link to a receiver connected to earpieces earried by adapted to be worn, in use, by an auscultating physician.
- 6. (Currently Amended) Apparatus according to claim 1, characterised in that it comprises further comprising signal processing means for combining information

derived from measurements of slowly varying static pressures with information from said microphone means in order to obtain a numerical value for a blood pressure.

- 7. (Currently Amended) Apparatus according to claim 1, e h a r a c t e r i s e d i n that wherein an inelastic strap attached to one shell part is provided to close [[the]] a gap between the shell parts.
- 8. (Currently Amended) Apparatus according to claim 7, e h a r a c t e r i s e d i n that wherein the strap is provided with means locking to the other shell part in conjunction with the overlapping of said strap and said other shell part.
- 9. (Currently Amended) Apparatus according to claim 8, e h a r a e t e r i s e d i n that wherein the amount of overlap between the strap and the shell part is used as a circumference measure for correcting the reading of blood pressure.
- 10. (Currently Amended) An apparatus according to claim 9, e h a r a e t e r i s e d i n that wherein the overlap is measured capacitively between an electrode or a plurality of electrodes fixed to the cuff and an electrode or a plurality of electrodes fixed to the strap.
- 11. (Currently Amended) Apparatus according to claim 1, e haracterised in that wherein the shells are fitted on hinge parts connected to handle parts operable by one hand.
- 12. (Currently Amended) Apparatus according to claim 1, e h a r a c t e r i s e d i n that wherein, in addition to a stiffness in the longitudinal direction, the shell structure displays a resilience in the circumferential direction.
- 13. (Currently Amended) Apparatus according to claim 12, e h a r a c t e r i s e d i n that the further comprising a hinge that is a continuous resilient part joining the shell parts.

- 14. (Currently Amended) Apparatus according to claim 11, 12, e h a r a c t e r i s e d i n that wherein the shell parts are integral with the hinge parts, forming one continuous sheet of material.
- 15. (Currently Amended) Apparatus according to claim 14, e h a r a c t e r i s e d i n that wherein the continuous sheet of material assumes a generally frusto-conical shape in its closed state.
- 16. (Currently Amended) Apparatus according to claim 11, e h a r a c t e r i s e d i n that wherein mechanical actuating means fitted in proximity to the hinge parts compress one shell part towards the other during measurement.
- 17. (Currently Amended) Apparatus according to claim 16, e haracterised in that wherein the mechanical actuating means consist of comprises an air cylinder and levers.
- 18. (Currently Amended) Apparatus according to claim 16, e haracterised in that wherein the mechanical actuating means consist of comprises strings fitted near the inner side of each shell part and disposed perpendicular to the longitudinal axis of such shell part.
- 19. (Currently Amended) Apparatus according to claim 1, e haracterised in that wherein the constrictable sleeve or an inflatable cuff forms an inner lining to the shell parts, providing an inflatable main air chamber.
- 20. (Currently Amended) Apparatus according to claim 7, e haraeterised in that an inflatable wherein the constrictable sleeve or cuff forms an inner lining to the shell parts, providing an inflatable main air chamber, [[that]] and wherein the strap is provided with air chambers disposed essentially perpendicular to the orientation of the shells and communicating with the main air chamber.

- 21. (Currently Application) Apparatus according to claim 1, e h a r a e t e r i s e d i n that the wherein joint support emulates a universal joint is emulated by means of a foam pad.
- 22. (Currently Application) Apparatus according to claim 1, e h a r a c t e r i s e d i n that the wherein joint support emulates a universal joint is emulated by means of a separate air chamber fitted between the cuff and the microphone array.
  - 23. (Cancelled).
  - 24. (Cancelled).
- 25. (Previously Presented) Apparatus according to claim 1, wherein said sleeve or cuff is adapted to fit an arm of a person.
- 26. (Previously Presented) Apparatus according to claim 1, wherein said sleeve or cuff is adapted to fit an leg of a person.